

What is claimed is:

1. A wind generator for generating electricity in response to wind flow, comprising:

a windmill comprising a shaft;

a plurality of blades secured to said shaft;

at least two moveable air foils which form an adjustable size opening for directing a selectable amount of said wind flow into said plurality of blades;

a base supporting said at least two air foils, said base being rotatably mounted for orienting said at least two air foils into said wind flow;

a ring gear mechanically affixed to said shaft; and

a plurality of generators arranged for mechanical interconnection with said ring gear.

2. The wind generator of claim 1 wherein each of said plurality of generators comprise mechanical elements operable for

mechanically engaging and for disengaging said generator with said ring gear.

3. The wind generator of claim 1 further comprising a control operable for maintaining a substantially constant rotating frequency of said vertically oriented shaft even as a speed of said wind flow changes by selectively varying a generating power capability of said plurality of generators connected to said shaft through said ring gear.

4. The wind generator of claim 3, wherein said control is operable for controlling wind flow to said plurality of blades through said adjustable size opening in coordination with varying said generating power for maintaining said substantially constant rotating frequency of said shaft even as a speed of said wind flow changes.

5. The wind generator of claim 4 further comprising moveable mechanical coupling elements such that said control is operable for mechanically coupling and uncoupling each of said plurality of generators from said ring gear to thereby control said generating power capability.

6. The wind generator of claim 3 wherein said control is operable for controlling a stator current associated with each of said plurality of generators to thereby control said generating power capability.

7. The wind generator of claim 1 wherein said at least two moveable air foils are positioned and shaped to direct said wind flow substantially only to blades which are in a portion of a rotation to be moving in the same direction of said wind flow and to block wind flow to blades which are in a portion of said rotation to be moving in the opposite direction of said wind flow.

8. A method for operating a windmill for generating electricity, comprising an axis rotated by a plurality of wind blades, said windmill comprising a plurality of generators, said windmill comprising at least one moveable wind foil, said method comprising:

monitoring a rotational speed of said axis;

varying a generating capacity of said plurality of

generators to vary resistance to rotation of said axis;

controlling an amount of wind flow directed at wind blades in a power producing portion of a rotation around said axis by utilizing said at least one moveable wind foil; and

maintaining a substantially constant rotational speed by controlling said generating capacity and a position of said at least one moveable wind foil in response to said rotational speed of said axis.

9. The method of claim 8 further comprising mounting a flywheel to said axis to assist in maintaining said substantially constant rotational speed.

10. The method of claim 9 further comprising providing a ring gear on said flywheel for interconnection with said plurality of generators.

11. The method of claim 10 wherein said generating capacity is varied by selectively engaging a respective rotor for each of said plurality of generators with respect to said ring gear.

12. The method of claim 11 further comprising varying at least one said moveable wind foil each time a respective of said

plurality of generators is selectively engaged with respect to said ring gear.

13. The method of claim 12 further comprising providing at least two wind foils which are relatively moveable with respect to each other whereby a variable opening is formed therebetween for use in said step of controlling said amount of wind flow directed at wind blades in said power producing portion of said rotation around said vertical axis.

14. The method of claim 8 wherein said generating capacity is varied by controlling a stator current for each of said plurality of generators.

15. The method of claim 8 wherein said step of controlling an amount of wind flow further comprises extending at least two wind foils radially outwardly from the wind blades to thereby provide a scoop capable of pulling in more air than would otherwise be received by the wind blades.